A CURSORY GLANCE Ten years from now we'll look back and be amazed by the fact that the most visionary among us will have vastly underestimated the effect of inexpensive computer power. You'll notice that I didn't say "home computers" or "microcomputers" or "personal computers". Basically, those terms are all almost meaningless. To my knowledge, nobody knows what a so-called "home" computer is, or what it will do. "Microcomputer" describes how big the computer is, but nothing else. Of those terms, the one that comes closest to having some meaning is "personal" computer. Many of our CURSOR subscribers don't know what it's like to have to interact ("fight" is a better way to describe things) with a large bureacracy in order to be able to do a little simple computing. (I know. I used to be part of such an organization. Which goes to show that the people who work at those sort of places aren't all bad, right?) The essence of having a "personal" computer is never having to compete with other users for scarce resources. Sure, given a small computer such as a PET, you have only so much computer power at your disposal. But within that limitation, it's all yours!

Inexpensive, widely available computing power best describes the computing revolution that we are all living through right now. Commodore's PET and CBM computers are very inexpensive, given the amount of computer power that they provide. One of the fascinating side-effects of cheap computing is that lots of people who don't know any better are taking these machines and solving problems that "professional" computer people think can't be done on such "toys". When we look back in five or ten years, we'll realize that the computing revolution began in the elementary school and junior high school class-rooms when they started turning kids loose with cheap computers. Even mighty IBM may never be the same, once a new generation of employees arrives, each one used to working with a PET or Atari.

OTHER NOTES You'll be seeing lots of Commodore advertising during the next few weeks. Just as this major new marketing thrust begins, it seems that there may be a big shake-up in Commodore's marketing division. One unconfirmed rumor is that the entire top layer of marketing people has already left. Since my telephone calls to marketing at Commodore have gone unanswered for the last week, I'm inclined to believe the rumors!

According to information from our friends at Compute Magazine and other sources, we think that Commodore has probably decided to go for the brass ring and introduce a new, low-end color computer to be called the TOI. Early units may be available in July or August. The TOI will be an interesting little machine. It will have a custom TV controller chip that will be quite powerful, (although probably not in the Atari class). We don't know how compatible the new machine will be with current PETs, but have heard that there will be some differences in addition to color and three-voice sound capabilities. It also looks like we can expect to see a new, cheap single disk drive unit from Commodore that will use the new, and very inexpensive 5 inch drive made in Japan for Shugart. Will those new little floppy disk drives show up packaged just above the keyboard of the PET? Yes, but we don't know when.

CURSOR 18 HAS THESE PROGRAMS: (Program names ending with "!" use CB2 sound)

COVER19 Perpetual steps. Animated display by Peter Stearns.

FROG! Just what sort of frog are you? (You'd better be hungry...) By Bob Carr.

GODZILLA! Save Japan from the King of the Monsters. By Randall Lockwood.

MINER! Grab your pick, drill, and some dynamite and mine for gold. By Ron Longfellow.

RAIL You are the engineer in this tricky train yard. By Chris Torkildson.

GBOOKA and **GBOOKB** Maintain a gradebook with these two programs by teacher Hal Carey. (Requires printer.)

MORE ABOUT THE PROGRAMS

FROG! This is another animated PET cartoon, but with a difference: you control the frog as you attempt to catch bugs and stay alive. Our old friend the numeric pad provides a way for you to control the beast. The controls are easy: all keys in the bottom row leave the frog sitting down, but extend his tongue a little [1], medium [2] or a lot [3]. The middle row causes the frog to jump up slightly, and the top row makes the little beast stand up as high as he can. Each attempt to catch a bug takes energy. As you might guess, it takes more energy to stand up and catch a fly than to just sit and catch it!   And, just sitting around and watching the flies also drains you of valuable calories. There are various skill levels, with higher skill levels causing the bugs to move faster and the poor little frog to burn energy faster.

GODZILLA! Godzilla, the King of the Monsters is about to attack Tokyo! You control troops, a navy, an air force as well as ten missiles and a single atomic bomb. When Godzilla goes on a rampage, he inflicts serious casualties to innocent civilians. Repeated attacks tend to wear him down, but he has a remarkable ability to recover! You lose if more than 20 million people die. (The residents of Tokyo probably won't vote you "Most Likely to Succeed", either.) The map on your screen has 25 sectors, identified by row and column, with no space in between. For example, 02 refers to row zero, column two.   Where moves are required, you type four numbers, with no space in between. Example: 1213 moves you from sector 12 to sector 13. The commands are:

I	Information. Shows the status of a sector, such as troop strength, population, ships and planes.
TM	Troop movement. This is how you move your land forces. Troops must stay on the land, and sailors at sea!
TA	Troop Attack. As Commander in Chief, you may attack Godzilla with your infantry.
SM	Ship Movement. Moves one ship between sectors.
SA	Ship Attack. Causes all ships in Godzilla's sector to attack him. Naturally, the more ships in that sector, the more powerful the attack.
M	Missile. Launches one of your ten missiles at Godzilla. Unfortunately, missiles also harm a lot of civilians, as well as your own troops.
AR	Air Raid. Launches a given number of planes from a specific sector, (if they are within range). Planes don't inflict damage on troops or civilians. (Who said this game was realistic?)
AB	Atomic Bomb. An extremely dangerous weapon that must be used with extreme caution, if at all. You can disable the bomb by deleting line 760 of the program.
Q	Quit. Does just that. Use **Q** to leave the game so that the sound registers get rearranged correctly.

MINER! In this game you are a gold miner, facing the normal hazards of a deep mine: there are cave-ins, (which sometimes cause you to lose all your gold!), as well as underground springs that will flood your carefully dug tunnels. You move by using the numeric pad [2] is down, [4] is left, [6] right, [8] is up and [5] means "stop". Naturally, the first thing to do is get in the elevator and move down. When you get to the level where you want to work, press [4] and start digging with your pick. Gold (or hazards, such as springs or hard rock) will occur at the dots. When you find gold, get in the elevator and deposit it in the bank! You have a drill [D], explosives [E], and a pump [P] at your disposal. However, using these tools costs money! You'll win the game when you amass $10,000.

RAIL This switchyard puzzle requires quick thinking, and even a bit of courage. A special train must be moved from the upper-right corner to a siding at the lower-left of your screen. You control the 12 switches in the yard by pressing the letter beside the switch. You must be careful to avoid hitting an open switch (which will cause you to derail), or running head-on into another train!

GBOOKA and GBOOKB These two programs do a lot of the "dirty work" of maintaining a teacher's gradebook. Note: the programs require a printer. **GBOOKA** is used to enter the list of students for a specific class. After you have entered the list, it is sorted, and printed on the screen for you to review. You can change any of the entries, add more names, or delete entries. When you are satisfied with the list, you can get a printed copy. The program assumes that you want to save and read cassette tapes on cassette number 1. You can change the variable FD% in line 100 to '2' if you want to use cassette drive number 2, or to '8' to use the 2040 disk. Note that the program always uses the same file name "GRADES", as it was designed mainly for cassette use. If you use the programs with disk, and have more than one class, you'll probably want to modify the program so that it asks you for a file name.

GBOOKB is used to enter grades for a new assignment, change grades, or to list the grades for all students. When you enter grades for a new assignment, you'll be asked for a four character assignment name, which will be used on the printed list to identify the assignment. You may also assign a weight for the assignment, (if you don't use weights, then enter a '1'). Grades are entered as percentages. You may indicate a missing grade by entering an asterisk '*'. The cut-points for assigning letter grades are used in lines 230-260, and of course may be changed to meet your requirements. After entering grades, you can get a printed list, which shows the four letter name for each assignment and the weight you gave the assignment. For each student, the program prints the student's name, grade for each assignment, their average, their letter grade, and the number of incompletes. At the bottom of the report you are shown the class average for each assignment. Naturally, after you've entered grades, you'll need to record the new information on tape or disk. (Again, line 100 controls the device where data is read and written.) We strongly advise you to maintain at least a three-tape system, i.e. don't ever record your most recent results "on-top" of the previous data file! There is too much risk of either human or computer error, and we don't want you telling your Principal "Well, I would have had my grades ready today, but I accidentally erased my data tape!"

Other comments: Line 190 of both programs controls the maximum number of students, (variable NS), and the maximum number of assignments (variable NA). If you are using an 8K Pet, use short student names, as the programs (especially GBOOKB) are tight on memory!